Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for communication of data, implemented in a receiver ~~between a transmitter and a receiver over one or more communication channels, the data being provided in a frame~~, the method comprising ~~the steps of~~:

~~at the transmitter:~~

~~(a) dividing the frame into segments according to an optimum segment size;~~

~~(b) combining multiple segments into a segment block;~~

~~(c) applying a forward error correction encoding process to the segment block to produce a forward error correction block;~~

~~(d) sending the forward error correction block over a communication channel;~~

~~at the receiver:~~

receiving a forward error correction coded block;

receiving a forward error correction code rate;

receiving a symbol modulation rate;

~~(e)~~ ~~applying a forward error correction~~ decoding ~~process on~~ the received forward error correction block to produce a ~~received~~ decoded block based on the forward error correction code rate and the symbol modulation rate;

~~(f)~~ dividing the ~~received~~ decoded block into segments;

~~(g)~~ determining if ~~any~~ a segment was received ~~in~~ with an error;

~~(h)~~ correcting the segment received with an error ~~according to the~~ using forward error correction ~~encoding, if possible~~; and

~~(i)~~ requesting retransmission ~~only~~ of the segment received ~~in~~ with an error only when the segment received with an error is not correctable ~~and unable to be corrected~~.

2. (Currently Amended) The ~~A~~ method of ~~as in~~ claim 1, ~~additionally~~ further comprising ~~the step of, at the transmitter~~:

~~(i)~~ ~~inserting~~ receiving a checksum in[[to]] the segments to enable identification of ~~erroneously received~~ segments received with an error ~~at the receiver~~.

3. (Currently Amended) The ~~A~~ method of ~~as in~~ claim 1, ~~wherein step (b) additionally comprises~~ further comprising ~~the step of, at the transmitter~~:

~~(j)~~ receiving ~~inserting~~ a position number in[[to]] the segments [[to]] identifying a position of the segment within the frame.

4. (Currently Amended) The ~~A~~ method of ~~as in~~ claim 1, further comprising:

~~wherein step (d) additionally comprises sending~~ receiving the forward error correction block ~~over~~ using multiple distinct communication channels.

5. (Currently Amended) The ~~A~~ method of ~~as in~~ claim 1, ~~additionally~~ further comprising ~~the steps of, at the receiver~~:

~~(k)~~ determining ~~the~~ a number of segments received ~~at the receiver~~ ~~in~~ with an error; and

~~(l)~~ determining [[the]] a ~~optimum~~ segment size for ~~the~~ a communication channel based upon the determined number of segments received ~~in~~ with an error ~~which were attempted to be communicated over that channel~~.

6. (Currently Amended) The ~~A~~ method of ~~as in~~ claim 5, ~~wherein steps (k) and (l) additionally~~ further comprising: ~~comprise~~

determining an error rate in each channel and a ~~an optimum~~ number of segments for each channel ~~individually~~.

7. (Currently Amended) The ~~A~~ method of ~~as in~~ claim 5, ~~wherein step (k) determines~~ further comprising:

determining ~~the~~ a number of segments received ~~in~~ with an error ~~at the receiver~~ by counting ~~the~~ a number of selective reject orders made to the transmitter.

8. (Currently Amended) The ~~A~~ method of ~~as in~~ claim [[1]] 5, ~~wherein step (k) determines~~ further comprising:

determining a ~~an optimum~~ number of frames according to a ratio of ~~a~~ the number of segments received ~~in~~ with an error to a number of segments received correctly.

9. (Currently Amended) The ~~A~~ method of ~~as in~~ claim [[1]] 5, ~~wherein step (k) additionally comprises~~ further comprising: ~~the step of~~

determining ~~an adjusted~~ a number of data bytes in a frame, X, from the formula:

~~$X = H + \sqrt{(X_{current} + H_{current}) * H / R}$~~

$$X = -H + \sqrt{(X_{current} + H_{current}) \times \frac{H}{R}}$$

where $X_{current}$ is the present number of data bytes in ~~a~~ the frame, $H_{current}$ is the present frame overhead in bytes, H is the new overhead for the frame in bytes, and R is a ratio of segments received ~~in~~ with an error to segments received correctly.

10. (Currently Amended) A method for providing wireless communication of digital signals, ~~the digital signals being communicated between a plurality of wireless subscriber units and a base station, the digital signals being communicated using at least one radio frequency channel via Code Division Multiple Access (CDMA) modulated radio signals, the digital signals also having a given nominal data rate,~~ the method comprising ~~the steps of~~:

providing ~~(a) making available~~ a plurality of sub-channels within ~~each CDMA radio~~ a channel~~, wherein a data rate of each sub-channel is less than the nominal data rate of the digital signals~~;

~~(b)~~ establishing a network layer session with multiple subscriber units ~~between terminal equipment connected to the subscriber unit through the base station to other terminal equipment connected to the base station~~; and

~~(c) during the network layer session,~~ allocating available sub-channels on an as-needed basis, ~~with~~ whereby the number of provided sub-channels ~~allocated thereby changing~~ changes during the duration of the network layer ~~a given~~ session;

~~(d)~~ dividing a network layer frame into segments according to optimum segment sizes;

~~(e)~~ combining multiple segments into a segment block;

~~(f) applying a~~ forward error correction encoding ~~process to~~ the segment block to produce a forward error correction ~~bock~~ block; and

~~(g) at a receiver, decoding the forward error correction block and divides~~ ~~dividing it back into segments; and~~

~~(h)~~ ~~requesting~~ receiving a request for retransmission only when a subscriber unit determines that a forward error correction block is not correctable. ~~of a segment received in error~~.

11. (Currently Amended) The ~~A~~ method of ~~as in~~ claim 10, ~~additionally~~ further comprising t~~he step of~~:

~~(i)~~ determining a ~~an optimum~~ segment size for the sub-channels based upon a predetermined number of segments received ~~in~~ with an error ~~which were attempted to be communicated over the sub-channels~~.

12. (Currently Amended) The ~~A~~ method of ~~as in~~ claim 10, ~~wherein step (i) additionally~~ further comprising: ~~comprises~~

dynamically adjusting the frame size of a channel to control ~~optimize the~~ an effective throughput ~~of the overall system~~ based upon the ratio of ~~actual~~ raw data transferred to ~~the~~ a total number of bits ~~actually~~ used to carry information, including frame overhead and retransmissions.

13. (New) A method, implemented in a transmitter, for communication of data, the method comprising:

dividing a data frame into segments according to a segment size;

determining a forward error correction coding rate based on a channel condition;

combining multiple segments into a segment block, wherein the segment block size is determined by the forward error correction coding rate;

applying a forward error correction encoding process to the segment block to produce a forward error correction block; and

transmitting the forward error correction block.

14. (New) The method of claim 13, further comprising:

inserting a checksum into the segments to enable identification of erroneously received segment.

15. (New) The method of claim 13, further comprising:

inserting a position number into the segments to identify a position of the segment within the frame.

16. (New) The method of claim 13, further comprising:

sending the forward error correction block over multiple distinct communication channels.

17. (New) A local service provider unit for communication of data in a wireless communication system, the local service provider unit comprising:

a receiver configured to receive data and determine a channel condition;

a processor configured to divide a data frame into segments according to a segment size, to determine a forward error correction coding rate based on the channel condition, and to combine multiple segments into a segment block, wherein the segment block size is determined by the forward error correction coding rate;

an encoder configured to forward error correction encode to the segment block to produce a forward error correction block; and

a transmitter configured to transmit the forward error correction block.

18. (New) The local service provider unit of claim 17, wherein the processor is further configured to insert a checksum into the segments to enable identification of a segment transmitted with an error.

19. (New) The local service provider unit of claim 17, wherein the processor is further configured to insert a position number into the segments to identify a position of the segment within the frame.

20. (New) The local service provider unit of claim 17, wherein the transmitter is further configured to send the forward error correction block over multiple distinct communication channels.

21. (New) A remote subscriber unit for communication of data, the remote subscriber unit comprising:

a receiver configured to receive a forward error correction (FEC) block, FEC code rate and a symbol modulation rate;

an encoder configured to forward error correction decode the FEC block to produce a received block based on the FEC code rate and the symbol modulation rate;

a processor configured to divide the received block into segments, to determine if any segment was received with an error, and to correct the error using forward error correction; and

a transmitter configured to request retransmission only if the segment received with an error is not correctable.

22. (New) The remote subscriber unit of claim 21, wherein the receiver is further configured to receive a checksum in the segments to enable identification of erroneously received segments.

23. (New) The remote subscriber unit of claim 21, wherein the receiver is further configured to receive a position number in the segments identifying a position of the segment within the frame.

24. (New) The remote subscriber unit of claim 21, wherein the receiver is further configured to receive the forward error correction block over multiple distinct communication channels.

25. (New) The remote subscriber unit of claim 21, wherein the processor is further configured to determine the number of segments received at the receiver with an error, to determine the optimum segment size for the communication channel based upon the determined number of segments received with an error.